

Notice of Allowability

Application No.

10/616,528

Examiner

Ingrid Wright

Applicant(s)

GLOVATSKY ET AL.

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/13/2006.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

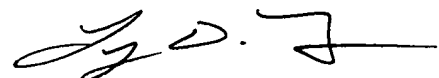
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892) ✓
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☒ Other 2 Attachments.



LYNN FEILD
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-11 are allowed.
2. The following is an examiner's statement of reasons for allowance: the allowability resides in the overall structure of the device as recited in independent claim 1, because claim 1 recites: "at least one axial channel interposed between the outer surface and the inner surface." The aforementioned limitations in combination with all remaining limitations of claim 1 are believed to render the claims and all claims dependent therefrom patentable over the art of record.

Note: See attached fig. 6A of Sasaki et al. & fig. 2 of Williams for elements representing limitations claimed in the instant application.

US 5204806 to Sasaki et al. is considered a close reference to the instant application. Sasaki et al. disclosed a housing (1) (see, fig. 6A), a cylindrical wall (see, wall of (1)) defining a central axis (see, center point along line B-B), a central compartment (see, fig. 6A), an inner surface (see, fig. 6A), an assembly support surface (see, fig. 6A) comprising a microelectronic assembly (3), but is silent specifically as to channels adapted for conveying cooling gas.

US 4756644 to Williams is considered to a close reference to the instant application. Williams disclosed a housing (10), comprising a cylindrical wall and channels (34) on a flange (28) adapted for conveying cooling gas through the housing (10).

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Although, the cited references are considered the closest references to the instant application, the central axis formed by the channels (34) of Williams will overlap the axial channel of Sasaki et al., located on the microelectronic assembly (see, fig. 6A of Sasaki et al.). The flange (28) of Williams is designed to be secured to a cylindrical outer wall of a housing, via welding, and would clearly overlap the microelectronic assembly located in the annular space of Sasaki et al. Furthermore, Sasaki et al. is silent as to mounting any such cooling channel structure between the solid wall of the cylindrical housing (1).

The Examiner has cited the following: US 6880335 B2, US 5105337, US 5121188, US 6137171, US 5621617, US 5794687, US 6346,000 B1, US 7030486 B1, US 20030185689 A1, US 6404637 B2, US 6665182 B2 & US 6404636 B1 are considered pertinent references to the instant application.

None of the cited references either alone or in combination is believed to render Examiner believed to render the present invention unpatentable as claimed.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571) 272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an

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application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IDW

A handwritten signature in black ink, appearing to read 'Lynn Feild', with a stylized flourish at the end.

LYNN FEILD
SUPERVISORY PATENT EXAMINER

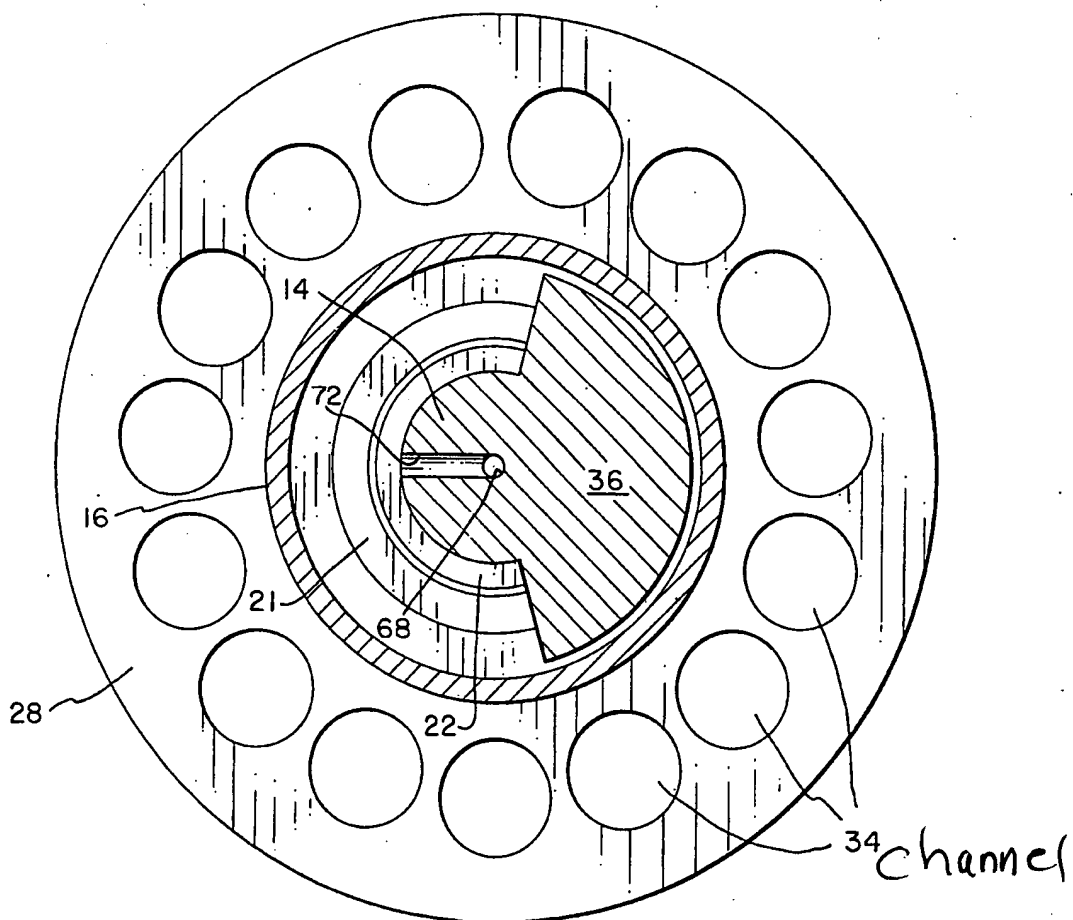


FIG. 2

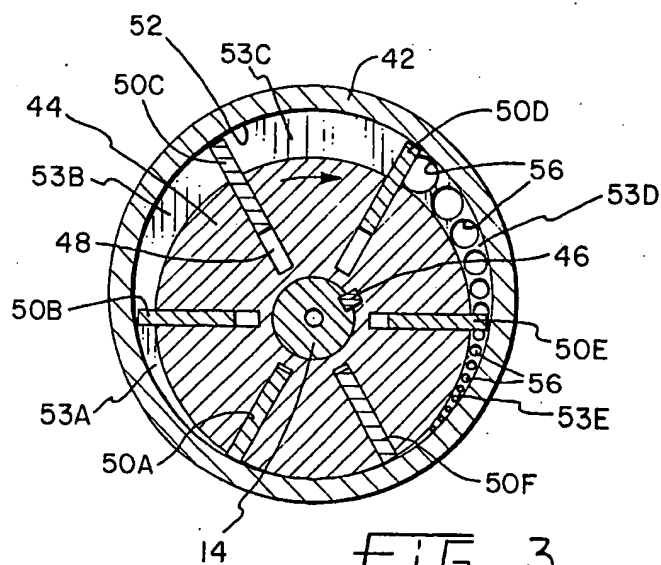


FIG. 3

